

REMARKS

The present amendment is submitted in response to the Final Office Action mailed July 13, 2007. Claims 1-2, 4-5, 18-20 and 22 have been amended, Claim 14 has been cancelled and Claim 27 has been added. No new matter or issues are believed to be introduced by this amendment. In view of the amendments above and the remarks to follow, reconsideration and allowance of this application are respectfully requested.

112, 6th paragraph

Applicants appreciate the Examiner's observation regarding the apparent lack of support for claims 22-23 under 112, 6th paragraph. During the interview, conducted on August 8, 2007, the Examiner explained that Claims 22 and 23 were rejected under 112, 6th paragraph because he failed to find support in the specification for the claim recitations related to "means for calculating" and means for embedding...". It is respectfully submitted that support for the "means for calculating ..." claim recitation can be found at page 7 of the specification where it states – Means 130 communicates with said memory circuit 120 and calculates a signature for the lines in memory 120. Further below on page 7, support for the "means for embedding..." claim recitation is supported by the statement – The signature calculated is preferably embedded as a watermark,

preferably a robust watermark, by means 140. Where Means 130 and 140 are hardware structures illustrated in Fig. 5.

Claim Objections

Claim 14 was objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 14 has been cancelled and re-written as Independent Claim 27, incorporating the limitations of Claim 1, as amended.

Claim Rejections – 35 USC 112

Claims 18 – 21 were objected to under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18-20 have been amended in a manner which is believed to overcome the objection.

Interview Summary

Applicants appreciate the courtesy granted to Applicant's attorney, Michael A. Scaturro (Reg. No. 51,356), during a telephonic interview conducted on Wednesday, August 8, 2007. During the telephonic interview, a number of issues regarding the Office Action were discussed and resolved. Amongst the issues discussed was the 103 rejection of Claim 1. Applicant's Attorney provided reasons explaining why the currently cited references do not teach the elements of Claim 1.

In particular, Applicant's Attorney pointed out that the block coding of a watermark image where each block represents an 8x8 pixel portion, as taught in Isnardi does not teach or suggest the calculation of a watermark based on a subset of the frame data. Applicant's Attorney pointed out to the Examiner and his Supervisor that any number of references could have been similarly cited for teaching block coding. It was further pointed out that there is no teaching in the cited references, alone and in combination, regarding the steps of - storing a first field of a frame of said audio-visual signal, thereby allowing for a reduced memory requirement relative to storing an entire frame of said audio-visual signal, and calculating a signature based on a the stored first field of a said frame of said audio-visual signal, as recited in Claim 1. Applicant's Attorney pointed out that these steps recite that the novelty of the invention is captured in these two steps in that a signature is calculated based on data from less than the entire frame. In response, the Examiner's Supervisor indicated that he believed that Claim 1 was not clear in this regard. In particular, the Supervisor stated that the claim could be interpreted to mean that the signature is calculated based on the entire frame. The Supervisor suggested that Claim 1 may be amended to explicitly recite that a field is comprised of a plurality, or at least multiple portions to remove any ambiguity in this regard. Then, by way of an appropriate amendment, it should be clear that the calculating step is performed on less than the entire field. Thereafter, it was agreed that the interview summary will state that an agreement was reached that an amendment to

Claim 1, as discussed during the interview, would clearly overcome the presently cited references and necessitate a further examination.

In the Office Action, Claims 1-9, 14, and 17-26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Isnardi (US-6037984-A) in view of Atul et al (“MPEG-4: An Object-based Multimedia Coding Standard Supporting Mobile Applications”).

In light of the Interview, Applicants have elected to amend Claim 1 to recite that a frame is comprised of at least two frame portions and that only a first frame portion is stored and operated on to calculate a signature:

1 (Currently Amended) A method of embedding a signature in an audio-visual signal for authentication of said audio-visual signal, said signal being comprised of a plurality of sequential frames, each of said plurality of sequential frames being comprised of at least two frame portions, the method comprising the steps of:

storing a first frame portion of a frame of said audio-visual signal, thereby allowing for a reduced memory requirement relative to storing an entire frame of said audio-visual signal,

calculating a signature based on a the stored first frame portion of a said frame of said audio-visual signal,

embedding the signature in one of said at least two frame portions of said frame of said audio-visual signal.

It is therefore respectfully submitted that at least the limitations and/or features

of Claim 1, as amended, is not anticipated by the disclosure of the cited references, alone and in combination.

Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claim 1 and allowance thereof is respectfully requested.

Claims 2-9 and 17-21 depend from Claim 1 and therefore include the limitations of Claim 1. Accordingly, for the same reasons given above for Claim 1, Claims 2-9 and 17-21 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejections with respect to Claims 2-9 and 17-21 and allowance thereof are respectfully requested.

Independent Claim 22 recites similar subject matter as Claim 1 and therefore contains the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claim 22 is believed to be allowable over the cited references, alone and in combination. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of Claim 22 is respectfully requested.

Claims 23-26 depend from Claim 22 and therefore include the limitations of Claim 22. Accordingly, for the same reasons given above for Claim 22, Claims 23-26 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejections with respect to Claims 23-26 and allowance thereof are respectfully requested.

35 U.S.C. §103(a)

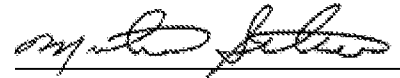
In the Office Action, Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Atul in view of Isnardi in further view of Vynnee et al. Claim 11 depends from Claim 1 and therefore includes the limitations of Claim 1, as amended. Accordingly, for the same reasons given above for Claim 1, Claim 11 is believed to contain patentable subject matter. Accordingly, withdrawal of the rejections with respect to Claim 11 is respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-9, 11, 17-27 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mr. Paul Im, Intellectual Property Counsel, Philips Electronics North America, at 914-945-9627.

Respectfully submitted,



Michael A. Scaturro
Reg. No. 51,356
Attorney for Applicant

Mailing Address:
Intellectual Property Counsel
Philips Electronics North America Corp.
P.O. Box 3001
345 Scarborough Road
Briarcliff Manor, New York 10510-8001